FAITH BASED ORGANIZATIONS

WHAT YOU SHOULD KNOW
ABOUT EARTHQUAKES...Faith based organizations (FBO) have had a long standing relationship with communities in the time of disaster. This relationship

will be more important than ever following a damaging earthquake in the central United States. A large damaging earthquake will be an event that few in the central U.S. will have ever experienced, and for that reason, the event will most likely cause some degree of panic and heightened concern for what has occurred and what may follow. Faith based groups

play an important role in working directly with the public following an earthquake.

The purpose of this brochure is to not only provide a basic understanding of the seismic hazard, but also to highlight the need of FBO's to take measures to reduce their own risk so that they are able to carry out their role following an event.

THE EARTHQUAKE HAZARD

The central U.S. is made up of a number of faults collectively known as the New Madrid and Wabash Valley seismic zones. This series of faults lies beneath the continental

crust in a weak spot known as the Reelfoot Rift. They cannot be seen on the surface. The fault system extends 150 miles southward from Cairo, Illinois through New Madrid and Caruthersville, Missouri, down through Blytheville, Arkansas to Marked Tree, Arkansas. It dips into Kentucky near

Fulton and into
Tennessee near
Reelfoot Lake,
and extends
southeast to
Dyersburg,
Tennessee. It
crosses five
state lines, and
crosses the
Mississippi
River in at least
three places.

Earthquakes

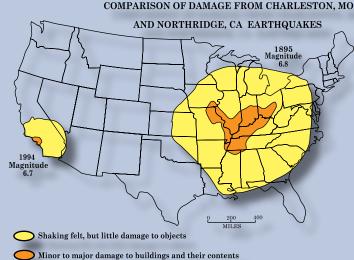


larger areas than earthquakes of similar magnitude in the western United States, possibly affecting an area up to 20 times larger. This means portions of Alabama, Arkansas, Illinois, Indiana, Kentucky, Mississippi, Missouri, and Tennessee are all susceptible to the direct effects of a damaging earthquake. Other fault systems in the central U.S., such as the Wabash Valley seismic zone and the East TN seismic zone, can also have a multi-state impact.

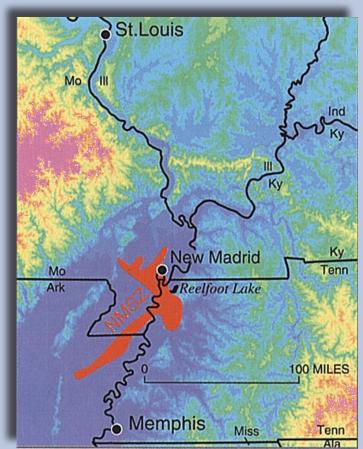
Scientists from the U.S. Geological Survey and universities across the central U.S. have established probabilities of occurrence of damaging earthquakes in the New Madrid seismic zone within a 50 year time period. These estimates include a 7-10% probability of a repeat of a major earthquake like those that occurred in 1811-1812 (around M8) and a 25-40% chance of a magnitude 6.0 or greater earthquake. Exactly when and where the next event will occur is impossible to say, but history and ongoing seismic events of smaller magnitude tell us the threat is real.

TAKING A DIFFERENT LOOK AT RISK: YOUR RISK

For all the good FBO's provide, they



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U.S. Geological Survey Fact Sheet 200-96

face the same risk as those they serve. It is important not only for FBO's to collectively look at their risk, but to also promote risk reduction among themselves and their members.

Many religious structures (mosques, churches, temples, schools) are built of unreinforced masonry or incorporate traditional domed and vaulted aspects, all of which are susceptible to damage. How and when they were built, and the types of materials used are just some of the aspects that can determine a structure's susceptibility to damage.

The historical significance of many religious structures, both to the religious organizations that own them, and to the community at large, are also worth noting. Loss of a structure can have a major impact not only to the members of the organization but to the community it serves.

For example, a large percentage of structures owned and operated by FBO's are defined as shelter sites or feeding centers in communities throughout the central U.S.. This is a valuable resource that could be at risk.

Structures which have been compromised will require inspection by qualified persons to determine if it is usable. This process



Photo Courtesy of EERI

could take days, if not weeks or months, when shelter is needed immediately.

Expensive repairs or even the demolition of structures which are not repairable are issues which also must be taken into consideration.

Conclusion

While we cannot prevent earthquakes, nor can we predict when they will occur, we can take action to protect ourselves, our families, homes, businesses and our communities. Education, planning, and preparation are proven means to minimizing the human impact of such disasters. Such programs reduce casualties to a fraction of what they would have been, and are extremely cost effective, returning hundreds of dollars in property saved for each dollar spent in mitigation.

CUSEC, working in partnership with its

member states, provides a broad array of services to local communities throughout the region.

For more information, visit the CUSEC website: http://www.cusec.org, or call: (800) 824-5817

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